#### PSRWG Meeting 5

#### Attachment-A

<u>Draft PSRWG Report – sections with Group Member's comments</u>

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# Act 254 Plastic Source Reduction Working Group

Report to Legislature

December 2020 Prepared by the Hawai'i Department of Health

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#### I. Introduction

The Hawai'i Legislature passed Act 254 (Appendix A) and reads as follows:

"The legislature finds that the local and global impact of the world's increasing waste stream is unsustainable and detrimental to the future of Hawai'i's economy and people. There has been an exponential rise in single-use foodware items over the past few decades globally, with particularly high increases in plastics derived from fossil fuels. Single-use disposable foodware and packaging—including plastic bottles, caps, lids, straws, cups, and polystyrene and plastic containers—are major contributors to street and beach litter, ocean pollution, marine and other wildlife harm, and greenhouse gas emissions."

#### II. Source Reduction vs. Recycling

Until recent years, recycling was the buzzword solution that was promoted to address the plastic waste issue. Although beneficial in many ways, recycling is a post-consumer solution to handle plastic waste. In order to reduce the overall generation of plastic waste, more municipalities are considering the feasibility of source reduction, which aims to mitigate the issue at the beginning of the plastic lifecycle.

Hawai'i Revised Statutes Chapter 342G-1 defines *source reduction* as "the design, manufacture, and use of materials to (1) minimize the quantity or toxicity, or both, of the waste produced; and (2) reduce the creation of waste either by redesigning products or by otherwise changing societal patterns of consumption, use or waste generation." By contrast, *recycling*, as defined in the same section, means "the collection, separation, recovery, and sale or reuse of secondary resources that would otherwise be disposed of as municipal solid waste, and is an integral part of a manufacturing process aimed at producing a marketable product made of postconsumer material."

#### III. Impact of Plastics in the Environment

Act 254 cites the following information regarding the impact of plastics in the environment:

"According to the United Nations, since the 1950s, the production of plastic has outpaced that of almost every other material. Much of the plastic produced is designed to be thrown away after being used only once. As a result, plastic packaging accounts for about half of the plastic waste in the world. Most of this waste is generated in Asia, while America, Japan, and the European Union are the world's largest producers of plastic packaging waste per capita. [...] Only nine percent of the 9,000,000,000 tons of plastic produced has been recycled. Most plastic ends up in landfills, dumps, incinerators, or the environment."

Additionally, plastic pollution has become increasingly prevalent around the world. More than 300 local municipalities in the US have banned plastic bags, and eight states, including Hawai'i, have statewide plastic bag bans. Many are also banning the use of expanded polystyrene foampolystyrene commonly known as Styrofoam—takeout containers as well as plastic service ware (i.e. cups, straws, forks, knives, etc.) in order to address other types of single-use plastic pollution.

**Commented [EJ1]:** Per Sanne Berrig: How about ...are "stressing" source reduction?

Note to editor: source reduction has <u>always</u> been part of the SW hierarchy but as the common saying goes, we cannot recycle our way out of where we are now; hence emphasis is being placed up the hierarchy, the first 2 R's -, **Reduce** and **reuse** – instead of jumping to the feel good, recycle.

Commented [EJ2]: Per Jaylen Ehara:

Replace "polystyrene" with "expanded polystyrene foam" and keep "commonly known as Styrofoam"

Commented [EJ3]: Per Alexis Chapman:

This is incorrect and should be removed. Styrofoam is a trademarked name for one particular type of polystyrene.

#### IV. Summary of Act 254

In 2019, the Hawai'i State Legislature passed Act 254. This act was intended to address the plastic waste issue by source reduction and had charted seven tasks for a plastic source reduction working group:

- 1. Formulate a plan for reducing and recovering plastic from the Hawai'i waste stream;
- 2. Develop strategies to encourage plastic reduction and reuse in the food service industry, such as reusable container incentive programs for customers;
- 3. Provide recommendations to encourage reuse, reduction, recycling, and recovery of waste and create value added products to innovate and responsibly manage the life cycle of existing resources;
- 4. Consult with each county that has already enacted ordinances related to single-use plastics such as plastic bags and polystyrene foam containers and develop recommendations for the implementation of a uniform, statewide policy for these items that can replace existing county ordinances and provide businesses with laws that are consistent throughout the State;
- 5. Consult with stakeholders to develop appropriate exemptions to address concerns of health and safety, lack of suitable alternative products on the market, and lack of infrastructure;
- 6. Evaluate potential lifecycle and environmental implications of replacing plastic packaging with alternative products; and
- 7. Shall submit a report of its findings and recommendations, including recommendations for pilot projects for Hawai'i businesses to phase out single-use plastic packaging, promote reuse, and find sustainable alternatives for packaging, as well as any proposed legislation, to the legislature no later than twenty days prior to the convening of the regular session of 2021.

## V. Membership

The working group sought to help Hawai'i to mitigate the damaging effects of plastic waste by including community stakeholders from various industries, organizations, and agencies. The membership of the group is described as follows:

Act 254 Membership Requirements	Member Name and Title	Member Organization
(1) The director of health or the director's designee;	Lene Ichinotsubo Acting Chief	Department of Health Solid and Hazardous Waste Branch
(2) The chairperson of the board of land and natural resources or the chairperson's designee;	Clifford Inn Program Specialist Catherine Gewecke Aquatic Biologist	Department of Land and Natural Resources Division of Boating and Ocean Recreation Department of Land and Natural Resources Division of Aquatic Resources
(3) The president and chief executive officer of the Hawai'i tourism authority or the president and chief executive officer's designee;	Chris Tatum President & CEO	Hawaiʻi Tourism Authority
(4) Four members, one to be appointed by each of the respective mayors of the city and county of	Justin Gruenstein Deputy Director	City & County of Honolulu Office of Climate Change, Sustainability and Resiliency
Honolulu and the counties of Hawai'i, Kaua'i, and Maui;	Sanne Berrig Recycling Specialist	County of Hawaiʻi Department of Environmental Management
	Allison Fraley Solid Waste Program Coordinator	County of Kaua'i Department of Public Works
	Tamara Farnsworth Division Manager	County of Maui Environmental Protection & Sustainability Division
(5) The state sustainability coordinator;	Danielle Bass State Sustainability Coordinator	State of Hawai'i Office of Planning
(6) A representative of the Surfrider Foundation;	Doorae Shin Oʻahu Chapter Coordinator	Surfrider Foundation

Act 254 Membership Requirements	Member Name and Title	Member Organization
(7) A representative of Zero Waste Oʻahu;	Nicole Chatterson Director	Zero Waste Oʻahu
(8) A representative of Sustainable Coastlines Hawai'i;	Rafael Bergstrom Executive Director	Sustainable Coastlines Hawaiʻi
(9) A representative of the Hawai'i Food Industry Association	Lauren Zirbel Executive Director Alexis Chapman (alternate)	Hawai'i Food Industry Association
(10) A representative of the Hawai'i Restaurant Association;	Victor Lim Legislative Lead	Hawai'i Restaurant Association
(11) A representative of the Chamber of Commerce Hawai'i;	Sherry Menor-McNamara President & CEO Dan Kouchi (alternate)	Chamber of Commerce Hawai'i
(12) A representative of the beverage industry;	David Thorp Senior Director of Governmental Affairs	American Beverage Association
(13) A representative from the plastic manufacturing industry; and	Adrian Hong President	Island Plastic Bags
(14) A representative of the recycling industry.	Bruce Iverson Director of Marketing and Development	Reynolds Recycling

#### VI. Methodology

Peter Adler, Ph.D. facilitated six meetings over the course of ten months (see Appendix B). Group members attended meetings both in person and virtually due to the COVID-19 pandemic restrictions. The group charter (Appendix C) describes the goals of the group as well as ways each member should contribute their ideas and opinions. Members participated in group exercises that exposed them to different perspectives and allowed them to share their own. Members participated in two permitted interaction groups (PIGs) that provided discussion for deeper insight and expertise required for formulating proposed recommendations for the State to address plastic source reduction. These PIGs looked at how to reduce, reuse and recycle plastic in different facets of our community and explored and compared county legislation that promote single-use plastic reduction in order to gain a better understanding of the current sentiments of the four counties (see Appendix D and Appendix E). Members of these PIGs drafted initial recommendations for the larger working group's consideration, and all group members had the opportunity to provide comments and edits in subsequent meetings.

#### VII. Recommendations

Per the legislative mandate, the working group has identified multiple ways for government, consumers, and local businesses to achieve greater statewide impacts and help accelerate the transformation to a more plastics-free Hawai'i.

Considering the COVID-19 pandemic and the evolving socioeconomic challenges brought on by this catastrophic event, the working group recognizes that the State of Hawai'i is in a unique position to find ways to bolster Hawai'i's economy while balancing environmental impacts. The plastic source reduction measures that follow have great opportunity to reduce costs, create new business and manufacturing opportunities in Hawai'i, create new local jobs for Hawai'i's people, and contribute to Hawai'i's sustainable and resilient future.

Plastic source reduction actions that increase consumer costs, create new public expenses for innovative projects, or provide tax credits to businesses probably cannot be done until there has been sufficient economic recovery and may likely be deferred. Nonetheless, the Act 254 Working Group believes recovery may offer niche opportunities to accomplish the important long-term goal of plastics source reduction through some of the specific economic recovery initiatives suggested in this report.

The working group recommends the following:

#### 1. Create a uniform statewide plastic source reduction standard.

#### Discussion

A uniform state standard that embodies the most stringent standards of the four counties has both advantages and disadvantages but must be implemented with care and precision.

On the advantage side, businesses must comply with one regulatory regime rather than four potentially different ordinances. Most enterprises and their business-to-business suppliers are accustomed to complying with various state ordinances. A uniform, statewide message (aimed at consumers) is more efficient to create and communicate, and more likely to achieve traction. The State must also have a uniform enforcement protocol, presumably lodged within a state agency. If it is to be enforced by the counties, the counties must receive a substantial portion of their funding from the State of Hawai'i to accomplish this.

**Commented [EJ4]:** Per Alexis Chapman: Where did this text come from?

Commented [EJ5]: Per Lene Ichinotsubo: Insert "in response to the seven specified tasks, and is in no particular order:" On the disadvantage side, counties are the unit of government closest to people. A statewide standard may inhibit the flexibilities that accompany home rule. More importantly, the four counties have very different demographics and tax bases. Having different recycling capabilities and waste management systems makes complete uniformity difficult for counties to achieve.

#### a. The new standard must be evolutionary and grown slowly.

#### Discussion

All the counties have laws and initiatives to reduce plastics but are proceeding somewhat differently. This means implementation of a state standard must proceed slowly and carefully with the Legislature's help. This would allow the counties to slowly harmonize their influence on consumer behavior and achieve greater disposal, reuse, and recycling implementation. This has two implications: First, the State must work closely with all four counties to coordinate efforts and slowly raise everyone's capacity in a networked manner. Second, as part of the passage of a state standard, the State must be prepared to make financial investments in the ability of all four counties to meet a new standard.

#### b. The new standard should start as a policy and evolve to law or provide adequate time for affected entities to implement the new standard.

#### Discussion

Commencing a statewide standard has advantages and disadvantages. As law, it creates real uniformity, binds future leadership, and capitalizes and perhaps accelerates the movement toward going "green." It could take the form of a target law. Target laws lack implementation plans and only have due dates. They require baselines and can motivate implementation (e.g., "By 2030, plastic disposal shall be reduced by 50% based on 2020 disposal rates..."). Laws can also provide a framework with clear direction on how to achieve said goals (e.g., "By 2025, the law shall prohibit retailers from distributing plastic carryout bags. Plastic carryout bags are defined as..."). These laws will likely require further refinement through the development of rules, in which case, the implementing agency will require the authority to develop rules.

Policies are more flexible, may have shorter lifespans, and demand less commitment. They may be more vulnerable to the whims and tides of politics but may better accommodate important county differences. For example, each county has its own integrated solid waste management plan but manages waste very differently (e.g., County of Hawai'i does not have curbside collection). Given the varying demographics, full uniformity is unlikely. With state policy, counties may develop their programs with said guidance. Issuance of policies are not legally enforceable, but also will not require financial support by the legislature to provide or implement.

Finally, if a new standard is made into law, uniformity and enforcement will be required. The implementing agency will also require authority to enforce and issue penalties. As with any new program, positions and appropriations will be required for state implementation.

**Commented [EJ6]:** Per Lene Ichinotsubo: Replace "disposal" with "waste reduction"

#### Commented [EJ7]: Per Danielle Bass:

Recommend calling this a "statutory target law" as other session laws which provide targets are difficult to refer to and can be forgotten since it is not codified in statute. Recommend this change for all references to "target law."

#### c. The new state plastics source reduction standard should not be weaker than standards among the four counties.

#### Discussion

This will require a careful and coordinated balancing act and need the full participation and decision-making of all four counties and the implementing state agency. On the one hand, a new standard must build off the existing laws and practices of all four counties and must not be weaker than the strongest of the four county ordinances. Collaterally, it then needs to create incentives that help the weaker counties become more capable and for the State and counties to grow together.

#### d. Maintain a public list of each County's regulations and their diferences.

#### Discussion

To enable a steady evolution towards a state standard and county harmonization, and as a starting point, the legislature could assign a state agency to maintain, regularly update, and publicize an accurate record of the evolving differences between the counties' ordinances.

The document serves two purposes. First, it provides direct guidance to businesses. Second, it becomes a sentinel reference for the State and the counties to work toward progressively better synchronization. The working group has compiled and attached some initial tables (see Appendix D and Appendix E), which compare the evolving requirements of the four counties. This provides a good start and can be updated as implementation work emerges. Counties could work with the assigned state agency to periodically update the tables and could publish it.

### **Commented [EJ8]:** Lene Ichinotsubo proposed alternate language:

To enable a steady evolution towards a state standard and county harmonization, and to assist businesses that operate locations statewide develop their own unified approach to comply with the counties' plastic ordinances, the Department of Health, Office of Solid Waste Management offers to maintain, regularly update, and publicize an accurate record of the evolving differences between the counties' plastic-waste ordinances on their website. County assistance in interpreting their ordinances and notifying the Department of any changes, will be required.

The working group has compiled and attached some initial tables (see Appendix D and Appendix E), which compare the evolving requirements of the four counties. This provides a good start and can be updated as implementation work emerges.

**Commented [EJ9]:** Per Sanne Berrig: This ending is unclear.

#### 2. Update the Department of Health (DOH) Health Code.

#### Discussion

Propose a specific plan and law changes that allow consumers to bring and use their own containers when picking up takeout orders from restaurants and when making bulk purchases. There should be a public-facing messaging component to inform the public about changes to the DOH Health Code. This will help to prevent the misconception that changes to the health code are decisions made by proprietors. Statute must expressly state that businesses serving consumers who bring their own containers are not liable for food-borne illnesses.

The working group recognizes that the COVID-19 pandemic has changed restaurant and supermarket practices under federal and state guidance, and that these new long-term practices are not likely to be fully developed by the time this working group submits it recommendations. Therefore, any proposed statutory changes should also follow appropriate public health guidelines.

**Commented [EJ10]:** Per Lene Ichinotsubo: "and/or"

Commented [EJ11]: Per Sanne Berrig: Sound awkward.

Commented [EJ12]: Per Lene Ichinotsubo: Insert "to use business-provided reusable, or third-party reusable"

I didn't think the intent was to prevent any other type of reusable container. As written, it sounds like the recommendation is limited to own personal container. I assumed this was tied to #4, need clarification.

#### Commented [EJ13]: Per Lene Ichinotsubo:

Has Peter Oshiro reviewed the latest language? I think he'd like to include language related to COVID that is not economic related by health related.

**Commented [EJ14]:** Per Catherine Gewecke: Should we include "or community transmissible illnesses" or a similar type of term?

#### Commented [EJ15]: Per Alexis Chapman:

This language may need to be altered a little to ensure that any statute creates strong liability protections. "Statute must provide legal liability protection for businesses serving consumers who bring their own containers in cases of foodborne illnesses."

**Commented [EJ16]:** Proposed language from Lene Ichinotsubo

Create a single, inclusive, across-the-board 15-30 cent user fee on all single-use service ware items (plastic table ware and plastic bags, but not cups, lids, and containers).

#### Per Dan Kouchi:

While we agree that the discussion and intent of this item was to find a way to help businesses be able to receive some type of revenue though the fee, upon further review, we feel that there might need to be more discussion regarding the impact that this could have on the customer.

For example, in Honolulu County, with Bill 40's implementation date approaching, food service providers will already be bearing higher costs as a result of the bans on disposable plastic service ware (1/1/2021) and on disposable plastic food ware (1/1/2022). These higher costs will most likely either be absorbed by the food service operator, resulting in reduced margins and/or be imposed upon the customer, which could result in the loss of customers as menu prices might need to be increased.

Additional feedback on this item by a board member also centered on the concern that the user fee could impose higher menu costs upon customers who would have no choice but to accept the "single-use take-out service ware item." Currently, State DOH rules do not allow customers to bring their own containers for take-out service due to safety reasons (and with the likelihood of COVID still being an issue for the indefinite future) it is unlikely that this will change, and the user fee could instead be seen as a mandated fee increase on the customer.

#### Commented [EJ17]: Per Kalani Ka'anā'anā:

In Honolulu County, food service operators will already bear the higher costs relating to the ban on disposable plastic service ware (effective January 1, 2021) and on disposable plastic food ware (effective January 1, 2022). These higher costs will either be absorbed by the food service operator (resulting in significantly reduced margins) and/or be imposed upon the customer (resulting in loss of customers due to higher menu pricing).

A"15-30 cent user fee" will impose higher menu prices upon customers, who do not have a choice but to accept the "single-use take-out service ware item." Under State Department of Health rules, containers provided by customers cannot be used for take-out service (for safety reasons, including the transmission of viruses and disease). Therefore, the "15-30 cent user fee" will be a mandated fee increase.

There is no "current carry-out bag fee" which applies to "prepared foods," and therefore, there is no "off-set" of current fees imposed upon customers.

#### Commented [EJ18]: Per Alexis Chapman:

This is challenging because the fee is not really optional, reusable containers aren't allowed now and we don't really know if/when they will be allowed, accepted by consumers as safe, and liability free for food establishments. We're concerned about anything that is going to increase the cost of food for Hawaii families, especially right now.

#### Discussion

The 15-30 cent across-the-board user fee will apply to all single-use takeout service ware items and carryout bags regardless of whether the material is plastic or compostable. The fee is comprehensive and intended to create simplicity. It will be inclusive of the current carryout bag fee and all service ware (e.g., 30 cents for one, two, or all three plastic utensils, which include forks, spoons, and knives). Subject to revisions of food safety regulations, fees cannot be charged for cups, lids, and containers. Food establishments should provide utensils and straws to customers "by request" or "positive response," regardless of whether there is a fee.

Fees gathered will be used to support businesses. Businesses will retain all the fees collected but must treat those as income and pay general excise tax. If the State chooses, as it often does, to take a portion of fee, the money should be paid into a single-use consumer education campaign for plastic source reduction and not used for general funding. If the fee were 30 cents, 25 cents would go to businesses and five cents to the State.

**Commented [EJ19]:** Per Lene Ichinotsubo: Insert "or something else" after "compostable"

Commented [EJ20]: Per Lene Ichinotsubo: Was the intent to split fee for bag and utensils separately (15 cents for bag, 15 cents for tuensils)? By splitting, a customer may choose only the bag and not the utensils. If this was the intent, then replace sentence with "For example, 15-cents will be charged if the customer wants a carryout bag, and another 15-cents will be charged if the customer wants a single or full set of service ware, such as fork, spoon, and/or knife."

Commented [EJ21]: Per Danielle Bass:
What agency will collect the fees? Can this be more specific about how the fees are collected? If the fees are collected by the state and the state provides a portion of the fees to businesses, what agency will do that? Are there current laws which private businesses can assess and collect these user fees? Will the total collection of fees be deposited into a state special fund to then distribute to the business community? What guarantee that the special fund of fee collection is not raided by future legislatures during future economic crises? Please explain what legal fee model this is attempting to mimic. Would appreciate the Deputy ATG to review this suggestion and advise the Working Group on this suggestion as well.

#### 4. Enact a tax credit for businesses that invest in modern commercial reuse and washing equipment that reduce the use of plastics in the waste stream.

Create a 10-year window and sunset provision of tax incentives for businesses that start offering consumers the option to use their own, to use business-provided reusable, or third-party reusable containers when making take-out orders from restaurants and when making bulk purchases; and for existing businesses that invest in new sanitizing equipment to promote reuse over disposal; and for or startup businesses that provide energy-efficient sanitizing services to other businesses.

The State and the counties will reduce costs in the long run by minimizing the amount of waste they have to deal with, but businesses need to be incentivized to make changes. Those changes will help drive consumer behavior.

Commented [EJ22]: Per Adrian Hong: We [plastic industry] suggest the paragraph be written more clearly about tax credit applicability. I wasn't on the PIG that made this recommendation but we think it would help legislators if we were more specific about what companies would get the tax credit.

Commented [EJ23]: Per Lene Ichinotsubo: This paragraph was confusing to me. Tried to edit for clarity. I assumed this was in part an extension of #2.

Commented [EJ24]: Edits made by Lene Ichinotsubo

#### Commented [EJ25]: Per Danielle Bass:

Can this also be water-efficient sanitizing equipment? Water Supply & Security is a major issue we need to plan for in our general sustainability efforts.



#### Organize and conduct a pilot project that tests the efficacy and expense of making UV-C technology available.

#### Discussion

Out of an abundance of caution, many grocery stores across the nation are prohibiting the use of reusable bags and turning back to single-use plastic and paper bags. In Hawai'i, many stores have allowed continued use of reusable bags provided the customer bags their own purchases. According to one study in the New England Journal of Medicine, germs appear to live longer on plastic than on paper. In the short-run, using single-use paper bags may be a better alternative than single-use plastic bags. In the long run, however, it will defeat solutions that enable source reduction.

UV-C technologies could potentially solve such problems. UV-C is a short-wavelength, ultraviolet light that breaks apart germ DNA leaving it unable to function or reproduce. UV-C light may be effectively germicidal if the technology can be scaled and additionally applied to reusable containers.

**Commented [EJ26]:** Per Catherine Gewecke: Add language to require the State to add a funding source? Not sure if this is necessary or not for this..

**Commented [EJ27]:** Per Catherine Gewecke: Suggested language: ...caution, "due to the COVID-19 pandemic or other similar transmissible viruses",

Commented [EJ28]: Per Lene Ichinotsubo

#### 6. Establish a 5-year State-facilitated education campaign about waste reduction.

#### Discussion

The campaign could be integrated with state goal setting and focus on steering consumer behavior and reducing dependence on single-use items. In order to effectively promote changed consumer behavior, the campaign must explain in simple terms the web of connectivity and the relationship between supply and demand. The focus is to change the whole community's awareness rather than only individual consumer behavior. The State of Hawai'i might also set up a website that serves as a resource. The campaign should make the non-use of plastics cool and trendy and ensure that a committee tasked with this includes outside experts and not just state employees. Regardless of whether the State contracts a third-party firm to develop and run the campaign or decides to run the campaign in-house, language must be added to require the State to add a funding source. Current resources are not adequate for a state agency to run this type of proposed campaign.

#### Commented [EJ29]: Per Adrian Hong:

We [plastic industry] recommend changing "The campaign could be integrated with state goal setting and focus on steering consumer behavior and reducing dependence on single-use items." to "The campaign could be integrated with state goal setting and focus on steering consumer behavior and reducing dependence on single-use items of all types."

**Commented [EJ30]:** Per Kalani Kaʻanāʻanā: Perhaps we could also look at a separate but related campaign that is visitor focused.

Commented [EJ31]: Per Catherine Gewecke: Suggested language: "appealing and contemporary" or "engaging and achievable" ... "and be able to communicate effectively to broad spectrum of public audiences"?



#### 7. Accelerate community and regional composting.

#### Discussion

Industrial scale, centralized composting is an option, but an expensive one that has large transport burdens and social justice issues. A progressive approach that focuses on incremental moves away from expensive centralized systems includes decentralized composting micro-grids that help create greater resiliency to natural disasters. There are many possible actions that can be taken:

- create small composting pilot projects with schools, farms, non-profits, and businesses to install in-vessel systems that will serve their specific communities;
- work with DOH to review and upgrade composting permit regulations that currently represent significant barriers;
- fund pilot projects on all islands through grants; and
- provide tax incentives to residents and businesses who set up community compost systems.

#### Commented [EJ32]: Per Danielle Bass:

Can this also be water-efficient sanitizing equipment? Water Supply & Security is a major issue we need to plan for in our general sustainability efforts.

Commented [EJ33]: Per Danielle Bass: How so?

Commented [EJ34]: Per Danielle Bass: Recommend removing "natural" since some disasters and emergencies are man-made.

#### Commented [EJ35]: Per Danielle Bass:

Recommend removing "natural" since some disasters and emergencies are man-made.

Insert "and emergencies" after "disasters"

#### Commented [EJ36]: Per Catherine Gewecke:

#### Potential new bullet point:

Incorporate the composting of home-compostable packaging in pilot compost projects. Identify which packaging is home compostable (in addition to identifying and omitting which home-compostable packaging may contain PFAS), test the compostability of these packaging alternatives within the pilot compost projects, communicate results to local companies that package their products within the state, in order to incentivize companies to potentially switch over to home-compostable packaging and participate in these local composting programs.

Composting offers an opportunity to create a value-added product for farmers and residents to increase food production, carbon sequestration, and reduce wasteful practices that do not treat organic materials as a resource. As plastics are phased out of waste streams, compostable alternatives need to increase. Increased composting leads to healthier soils, which in turn expands opportunities for local food production and reduce the necessity for plastic-wrapped imports to our state.

New Language for the last paragraph per Lene Ichinotsubo:

Composting offers an opportunity to create a value-added product for farmers and residents to increase food production, carbon sequestration, and reduce wasteful practices that do not treat organic materials as a resource. Use of compost leads to healthier soils, which in turn expands opportunities for local food production and reduces the necessity for plastic-wrapped imports to our state. As plastics are phased out of waste streams, compostable alternatives may increase. However, further evaluation on the feasibility of compostable products is needed prior to requiring its replacement for plastic ware and its full acceptance at composting facilities.

**Commented [EJ37]:** Per Sanne Berrig: Perhaps this should be the first sentence as the reader will be wondering how composting is tied with plastic reduction.

#### 8. Undertake a fair and careful study of Extended Producer Responsibility (EPR)

#### Discussion

EPR is a policy approach to waste reduction that encourages manufacturers to design environmentally friendly products by holding them responsible for the costs of managing their products at the end of life. EPR shifts the economic burden of the cost of disposal from the government to the producer of the product. According to the Organization for Economic Cooperation and Development, assigning such responsibility could in principle provide incentives to prevent wastes at the source, promote product redesign for environmental protection, and support the achievement of public recycling and materials management goals.

The study should include a comprehensive legislative database study on the impacts of a possible EPR law for packaging in Hawai'i. This study should incorporate lessons learned and discussions from other states and the federal government that have been pursuing parallel efforts to implement EPP

The study should analyze the following two specific scenarios:

- (1) EPR in Hawai'i independent of other state and federal packaging EPR initiatives; and
- (2) packaging EPR in Hawai'i in conjunction or synchronicity with other state and federal initiatives.

The study should evaluate:

- the best science available;
- costs and benefits to all stakeholders (i.e. environment, consumers, taxpayers, government, and businesses, etc.);
- the pros and cons; as well as
- · feasibility.

This study should also evaluate the various forms of EPR and consider narrowing the scope of this study by evaluating EPR for a subset of packaging, not just EPR for all types of packaging.

#### Commented [EJ38]: Per Dan Kouchi:

The Chamber continues to have reservations regarding any type of Extended Producer Responsibility policy enacted without taking into account the specific impact that it would have on Hawaii. Preferably, it would be ideal that any EPR legislation would be put on hold until after a study and results have been released so that legislators and stakeholders are able to review the results to create sound policy that could benefit both businesses and environmental conservation efforts. Given Hawaii's reliance on importing goods, any study needs to thoroughly review how any EPR policy might impact the prices and future accessibility of goods that we cannot realistically grow or produce locally.

While there is also not indication on who would be administering the study (if the state would contract this out, or assign a specific department) it would be good to have it be done by an organization that would be able to provide a non-biased opinion in order to avoid any perception of bias towards one side or the other.

Commented [EJ39]: Per Sanne Berrig:

**Commented [EJ40]:** Per Lene Ichinotsubo: Not sure what this means.

**Commented [EJ41]:** Per Sanne Berrig: Insert "namely plastic," after "packaging"

# VIII. Potential Lifecycle and Environmental Implications of Alternative Products

The lifecycle of plastic packaging has been known to have damaging effects on the environment. However, in order to make intermediary steps towards a more plastics-free society, the lifecycle and environmental implications of alternative materials and products must be assessed. Due to COVID-19 pandemic restrictions to meetings, the working group was unable to perform an in-depth evaluation of alternative materials and packaging but was able to compile lifecycle assessment studies that have made such evaluations (see Appendix F).

#### IX. Personal Statements

(Statements from WG members are a chance to say "Yes...and" by adding additional thoughts or ideas a member wants to make legislators aware of. Statements must not exceed a strict limitation of 500 words double spaced and should be sent in Word so they can be incorporated with the final report.).

## **Commented [EJ42]:** Per Lene Ichinotsubo: I think that the Oregon study that has the LCA for food

I think that the Oregon study that has the LCA for food service ware is important to include. The ones we have on the list only address bags.

#### Commented [EJ43]: Per Catherine Gewecke:

#### Potential idea for this section:

Organize and conduct a pilot project that researches the ingestibility or potential ecotoxicity of home-compostable cellulose packaging films (such as the packaging films that NatureFlex produces) on aquatic organisms. NatureFlex films are certified to US, EU, and Australian standards for industrial and home composting.

The Australian standard AS 5810 takes worm toxicity into account. The vermicomposting test is under the standard ASTM E1676. NatureFlex films are approved for vermicomposting, however testing with aquatic life has not been done (unless worms can be used as a proxy).

In order to provide options for alternative materials in Hawaii (if the State were to move towards requiring the use of alternative packaging materials), it would be beneficial to research the impacts of these home-compostable alternatives on aquatic organisms before they are able to microbially decompose (e.g. before 12 weeks).

The escapement of these products before the required time for decomposition may create similar digestive block issues as plastics; verifying that these can be digested if they were to enter the ecosystem before they decompose, or collecting data on the effect of the marine environment itself (saltwater) on home-compostable cellulose products (in terms of decomposition) would be beneficial in terms of recommending effective packaging alternatives.

Add language to require the State to add a funding source? Not sure if this is necessary or not for this.